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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,115	09/19/2003	Russell Norman Mirov	SUN03-0112	8531

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EXAMINER

DINH, TUAN T

ART UNIT	PAPER NUMBER
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2841

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/667,115

Applicant(s)

MIROV, RUSSELL NORMAN

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 34-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7 and 34-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/08/07 has been entered.

Note:

Claims 1-3, 5-7, and 34-44 are pending in this application based on the election of the applicant, which is the Specie I, figure 1 filed on 10/31/05.

The finality of that action mailed on 02/20/07 is withdrawn.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "one or more **operating functions** of the circuit board, claim 36, lines 1-2" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. What does applicant means of "one or more **operating functions** of the circuit board"? please, clarify in the drawing and specification

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 34-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 34, lines 10-11 and claim 43, lines 8-9, it is unclear. The phrase of "wherein removal of the tab at OR near the proximate end so as to separate said identification module...to be broken" is not understood. What does applicant mean?

How can "removal of the tab at so as to separate the module and cause the signal trace to be broken"? And also, figure 1 does not show that structure as claimed.

Please clarify.

Claim 34, line 7, applicant recites the limitation of "an identification module", which is defined in another embodiment (not in figure 1), see page 4, lines 12-20. So, the term "the identification module" would be changed to correct the term such as "an identification" for proper structure and reading of figure 1 described in a specification.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 34-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification is silent to regarding the limitations of "wherein removal of the tab at OR near the proximate end so as to separate said identification module...to be broken".

By applying art, examiner assumes that the phrase as above would be read as "wherein removal of the key from the circuit board assembly causes said portion of the signal conductor to be not electrical contact to the assembly."

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 5-7, 34-36, and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Matson et al. (U.S. Patent 4,695,112) as in the record.

As to claims 1-3, Matson discloses a circuit board (12, column 2, line 7) as shown in figures 1-2 comprising: a mechanism (16, column 2, line 9) comprising:

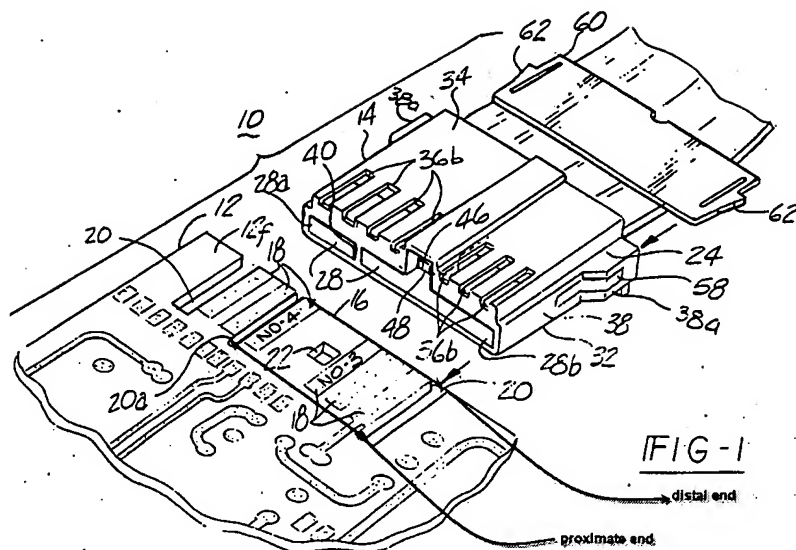
signal means for (wire traces 18, and circuitries formed in/on the circuit board 12) conducting a signal between the mechanism (16) and the circuit board (12); and

separation means (gaps 20, column 2, line 15) for facilitating detachment of the mechanism (16) from the circuit board (12);

identification means for (labels No.1-No.6, figure 1 shows the label No.3 and No.4) identifying the mechanism (16);

wherein the circuit board becomes at least partly non-functional if the mechanism is detached from the circuit board.

As to claims 5-7, Matson discloses in figure 1 the identification means being a circuit (conductor run (18), visible identification code (labels No. 3, No. 4), and being protected (by a molded connector 14) from being easily manipulated.



As best understood to claims 34, 40-41, Matson discloses a circuit board assembly, shown in figure 1 comprising: a circuit board (12) comprising a tab (key tab-16) having: proximate and distal ends (see figure above); and two opposing sides separated from the assembly by gaps (slots 20); an identification (labels N0.1-No.6 formed on conductor runs 18 to identify the function of leads/pins of the conductor runs) situated on the tab (16); and a signal conductor (traces or wirings on the board) extending from the circuit board to the tab and configured to convey a signal when the assembly is powered, and wherein removal of the key from the circuit board assembly causes said portion of the signal conductor to be not electrical contact to the assembly.

As to claim 35, Matson discloses the circuit board assembly cannot be powered if the signal conductor is broken (it is inherently that if one of the trace or wiring being broken or damage then the board cannot be operated).

As to claim 36, Matson discloses one or more operating functions of the circuit board become inoperable when the signal conductor is broken.

As to claim 39, Matson discloses the identification module comprises a sequence of characters (labels).

As to claim 42, Matson discloses the signal conductor (traces) does not extend to the distal end of the tab (16).

As to claim 43, Matson discloses a circuit board assembly as shown in figures 1-2 comprising:

- a signal conductor (18); and

- a key (16) removably connected to the circuit board assembly and comprising: an identification (labels); and

- a portion of said signal conductor (the key including a portion of the conductors 18 and labels formed on the conductors);

wherein while said key is removably connected to the circuit board assembly a plurality of gaps (20, see figure 2) are defined between the circuit board assembly and said key; and wherein removal of the key from the circuit board assembly causes said portion of the signal conductor to be not electrical contact to the assembly.

As to claim 44, Matson discloses a circuit board as shown in figures 1-2 comprising:

- a key (16) removably connected to the circuit board, the key comprising: a portion of a signal conductor (18) configured to conduct a signal between the key and the circuit board; and an identification (labels) configured to identify the key;

wherein the key is removably connected to a first portion of the circuit board but is separated from other portions of the circuit board by a plurality of gaps (20); wherein the gaps facilitate detachment of the key from the circuit board; and wherein one or more functions of the circuit board become at least partly non-functional, including conduction of a signal by the signal conductor (18), if the key is detached from the circuit board (it is inherently that cause the signal line/trace/wiring being non functional when the conductor signal not connected to the assembly).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matson ('112).

As to claims 37-38, Don discloses all of the limitation of the claimed invention, except for the identification comprises a hologram or barcode.

However, the barcode or hologram is well known in the art that provide an identification or logo for the product. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a barcode or hologram to modify the labels as taught by Matson for the purpose of verifying or identification product.

Response to Arguments

11. Applicant's arguments with respect to claims 1-3, 4-7, and 34-44 have been considered but are moot in view of the new ground(s) of rejection.

a) Matson discloses "identification means", which is not identifying "the mechanism."

Examiner disagrees because as Matson disclosed the identification labels formed on the signal traces (18) for identify the mechanical insertion of the circuit board into the assembly.

b) "identifying means" of Matson is not "real". The examiner disagrees, the labels formed on the conductor signals (18) that identify the number of conductor signals of a circuit board. So, the label is real part for identifying the mechanical insertion of the circuit board into the assembly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reichard Dean can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Tuan Dinh', with a long, sweeping horizontal line extending to the right.

Tuan Dinh
March 15, 2007.